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(54) Title: COSMETIC COMPOSITION

(57) Abstract: The cosmetic composition contains peat and betaine, and a moisturising and softening compound that is approved within the cosmetic field. The compositions is, depending on the carrier chosen, suitable for cosmetic masks for the face, chin and/or scalp. The composition is pleasant and safe for the user.

COSMETIC COMPOSITION

The invention at issue refers to a new cosmetic composition, in which peat is one of the components. The composition according to the invention can be used for cosmetic facemasks for the face, neck and scalp.

In Finland, as for example in Germany and Austria, peat has been used through the ages as a raw material in different areas. Within the cosmetic area, it has mostly been used mixed with water (1/3 water and 2/3 peat) for treatments given at spas, by hairdressers and by cosmetologists in care for either the whole body, or for the scalp. Often, peat and mud, which are also used in facemasks, are mixed together. In this context, it might be useful to emphasise the fact that peat is not derived from the bottom of the sea, but is the result of the decaying of the forest.

The possibilities of using peat at home are limited due to the fact that the use of the peat-water mixture is messy and untidy. Depending on the time and place of the peat winning, the peat is often quite microbiologically impure, and many peat-water mixtures on the market do not fulfil the microbiological demands stipulated in the cosmetic legislation. Furthermore, peat is a very acidic substance, which means that it is aggressive and irritating to the skin.

The patents DE 195 23 459 and EP 800 819 refer to skin and hair care products that contain homogenised peat. A mixture containing triethanolamine as a moistening component is also described. However, triethanolamine neutralises the acids in the peat and thereby diminishes the peat's advantageous influences.

According to the invention, the necessary components in the mixture are peat and betaine, the latter of which moisturises the skin and protects it from the irritation caused by the contained acids. The peat that is used in the composition is finely ground, which also makes it more suitable for cosmetic purposes and increases the product's efficiency. The peat that is used in the composition has to have such a microbiological purity that the composition as such fulfils the demands on microbiological purity stipulated in the cosmetic legislation. Preferably, the composition contains 5-30 weight-% peat. A more preferred alternative is 20-30 weight-%, or even 20-25 weight-%. Preferably the peat should be sedge or moss peat, or a mixture of the two.

In the description, as in the claims, betaine refers to a compound with the chemical name trimethylglycine or trimethylammonium acetate. Betaine has a moisturising function in the composition. In addition, the joint effect of peat and betaine is beneficial to the skin, since peat cleanses and brightens the skin and betaine both moisturises and protects it against possible irritations caused by the peat. However, betaine does not neutralise the humic acids in the peat. These acids are important for the activity and function of the peat. The peat-betaine mixture also retains heat, as well as moisture in the skin, while at the same time intensifying skincare. Betaine also improves the dispersion of the peat and increases the stability of the emulsion. Preferably, the composition contains 3-15 weight-%, and even more preferably, 4-10 weight-% or 4-6 weight-% betaine.

It is also possible to add an additional moisturising component to the composition. Suitable substances that both moisturise and soften the skin are glycerol, sorbitol, xylitol, propylene glycol, butylene glycol and pentylene glycol. These substances can either be used on their own or in combination.

According to the invention, the carrier in the composition can, for example, be an oil-water emulsion or an alcohol-water mixture. Depending on the carrier, the composition can either be in the form of a cream, that stays soft and elastic on the skin, or one that dries into the form of a film on the skin and is then torn off. In the description, as in the claims, the term oil-water emulsion refers to an emulsion that can be of the type oil-in-water emulsion, water-in-oil emulsion, water-oil-water emulsion or micro emulsion.

According to the invention, the composition, to a certain extent and dependant on the carrier, can additionally contain one or more approved additives within the cosmetic field. For example, preservatives, thickeners and other further suitable ingredients including substances that lighten and/or soften the skin, as well as perfume and colour substances. Suitable preservatives are, for example, parabenes, phenoxy ethanol, imidazolidinyl urea and methyldibromoglutaronitrile. These preservatives can be used on their own or in combination. Any thickener that is suitable within the cosmetic area can be used, as long as it is compatible with the other components in the composition. Examples including xanthan rubber and hydroxyethyl cellulose, hydroxypropylmethyl cellulose, Sclerotium gum, Chondrus Crispus, polyacrylates, polyacrylic amides and magnesium aluminium silicates can be mentioned.

The thickeners can be used on their own or in combination. Substances suitable for lightening the skin or improving the bleaching are, for example, liquorice extract, arbutin, kojic acid as well as extracts from birch bark that contains betuline and betulinic acid as active substances. Substances suitable for lightening the skin or improving the bleaching can be used on their own or combined with each other.

When using an oil-water emulsion carrier, one or more emulsifiers is needed, i.e. a compound that disperses and stabilises the oil in the water. Suitable emulsifiers are all non-ionic emulsifiers that are approved according to the cosmetic legislation. For example, glyceryl stearate, PEG-5 glyceryl stearate, PEG-100 stearate, hydrogenated lecithin and PEG-8 beeswax, as well as a mixture of fatty glucosides, for example, ceteraryl, cocoyl or myristyl glucosides, and fatty alcohols, for example, cetearyl, cetyl, stearyl or myristyl alcohols.

In an oil-water emulsion, betaine does not only have moisturising effect but also improves the viscosity of the emulsion, and in that way also improves its consistency. Furthermore, it improves the dispersion of the peat in the emulsion and the stability of the emulsion itself.

Ordinary kaolin based cleansing masks dry when used and are difficult to remove, whereas a composition according to the invention, combined with an oil-water emulsion carrier, stays soft and elastic on the skin during the whole treatment and is therefore easy to remove by, for example, rinsing with water.

To the alcohol-water carrier, it is also possible to add one or more polymer components that are approved within the cosmetic field. For example, polyvinyl alcohol, ethoxylated fatty alcohols, vinyl caprolactam/polyvinyl pyrrolidon (PVP)/copolymers of dimethyl-aminoethylmethacrylate, PVP, PVP/copolymers of dimethyl-aminoethylmethacrylate or copolymers of acrylate octyl acryl amide.

A composition according to the invention, combined with an alcohol-water mixture carrier, forms a film that dries on the skin and can be torn off after the treatment. In this form, it can also be used locally as a plaster, for example, on the nose, forehead and/or the chin (the so-called T-area of the face), or on any area of the face.

The composition according to the invention is intended for the cleansing, moisturising, softening, roughness reduction, smoothing and calming of the skin. It is also intended for the lightening and bleaching of the skin. It can also have an immune stabilising effect. Combined with an oil-water emulsion carrier, the composition can also be used as a mask for treatment of the scalp. The composition simplifies mechanical cleansing of the skin, when spots and other impurities are removed.

The invention will be clarified with the use of the following example.

Example 1

Ready-to-use composition in cream form

	Weight-%
Water	33-44
Peat	20-25
Kaolin	10-14
Polydecene (Nexbase, Fortum)	8-12
Glyceryl stearate (Cutina GMS-V, Henkel)	4-6
Betaine (Cultor)	4-6
PEG-100 stearate (Simulsol 165, Seppic)	2-5
Titanium dioxide (Kemira)	2-4
Butylene glycol	1-2
Xanthan rubber (Satiexane, Bio-sanofi)	0.2-0.3
Rosmarinus Officinalis	0.05
Phenoxy ethanol (Nipa Laboratories)	
Methyl paraben (Nipa Laboratories)	
Buthyl paraben (Nipa Laboratories)	
Ethyl paraben (Nipa Laboratories)	
Propyl paraben (Nipa Laboratories)	
Glycyrrhiza glabra (liquorice extract)	
Perfume	

Polydecene, glyceryl stearate, PEG-100 stearate and part of the phenoxy ethanol, methyl, buthyl, ethyl and propyl paraben are mixed and heated to 80 degrees Centigrade (portion A). Water, betaine, xanthan rubber and part of the the phenoxy ethanol, methyl, buthyl, ethyl and propyl paraben are dissolved into each other and heated to 80 degrees Centigrade, at which point the mixture is added to portion A through homogenisation for a duration of 2 minutes. After the homogenisation, the mixture is cooled to below 60 degrees Centigrade while stirred. The peat is added and the mixture is homogenised for 2-5 minutes. Kaolin, titanium oxide and butylene glycol are each added separately during stirring. The mixture is cooled to below 40 degrees Centigrade while stirred, and finally Rosmarinus Officinalis, liquorice extract and perfume are added.

Demands:

1. Cosmetic composition, characterised in that it contains peat and betaine.
2. Composition according to claim 1, characterised in that it contains 10-40 weight-% peat.
3. Composition according to claim 2, characterised in that it contains 20-25 weight-% peat.
4. Composition according to any of the claims 1-3, characterised in that it contains 3-15 weight-% betaine.
5. Composition according to the claim 4, characterised in that it contains 4-10 weight-% betaine.
6. Composition according to claim 5, characterised in that it contains 4-6 weight-% betaine.
7. Composition according to any of the preceding claims, characterised in that it also contains one or more additive that is approved within the cosmetic field.
8. Composition according to any of the preceding claims, characterised in that it is combined with an oil-water-based carrier.
9. Composition according to any of the preceding claims, characterised in that it is combined with a carrier based on a water-alcohol-mixture.

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9118588 A1 (CULTOR LTD.), 12 December 1991 (12.12.91) --	1-9
X	WO 9813021 A1 (CULTOR LTD.), 2 April 1998 (02.04.98) --	1-9
X	EP 0800819 A2 (BEINIO, HEINZ), 15 October 1997 (15.10.97) --	1-9

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HU 210235 B (FOLYEKONY HULLADEK SZALLITO VALLALAT) 1995-07-28 (abstract) World Patent Index [on line]. London, U.K.: Derwent Publications, Ltd. [retrieved on 2001-02-23]. Retrieved from: EPO WPI Database. DW 199624, Accession No. 1996-233036 --	1-9
A	DE 19523459 A1 (BEINO, HEINZ), 2 January 1997 (02.01.97) --	1-9
A	GB 465719 A (BARR, KENNEDY ET AL), 14 May 1937 (14.05.37) -- -----	1-9

INTERNATIONAL SEARCH REPORT
Information on patent family members

05/02/01

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Patent document cited in search report				Publication date		Patent family member(s)	Publication date
WO	9118588	A1	12/12/91	AT	141154	T	15/08/96
				DE	69121405	D,T	23/01/97
				EP	0531387	A,B	17/03/93
				SE	0531387	T3	
				ES	2093102	T	16/12/96
WO	9813021	A1	02/04/98	EP	0930870	A	28/07/99
				FI	103711	B	00/00/00
				FI	963849	A	27/03/98
EP	0800819	A2	15/10/97	DE	19615470	A	23/10/97
				DE	29622819	U	16/10/97
DE	19523459	A1	02/01/97	NONE			
GB	465719	A	14/05/37	NONE			